



RESEARCH REPORT

Catalog number	00-001
Date:	February 7, 2000
Subject:	Parks and Recreation Operation and Maintenance Needs Assessment.
To:	David R. Smith, County Administrative Officer
From:	Sandi Wilson, Deputy County Administrator Chris Bradley, Budget Manager
Prepared By:	Michael Kuzmin, Budget Analyst Don Colvin, Senior Budget Analyst

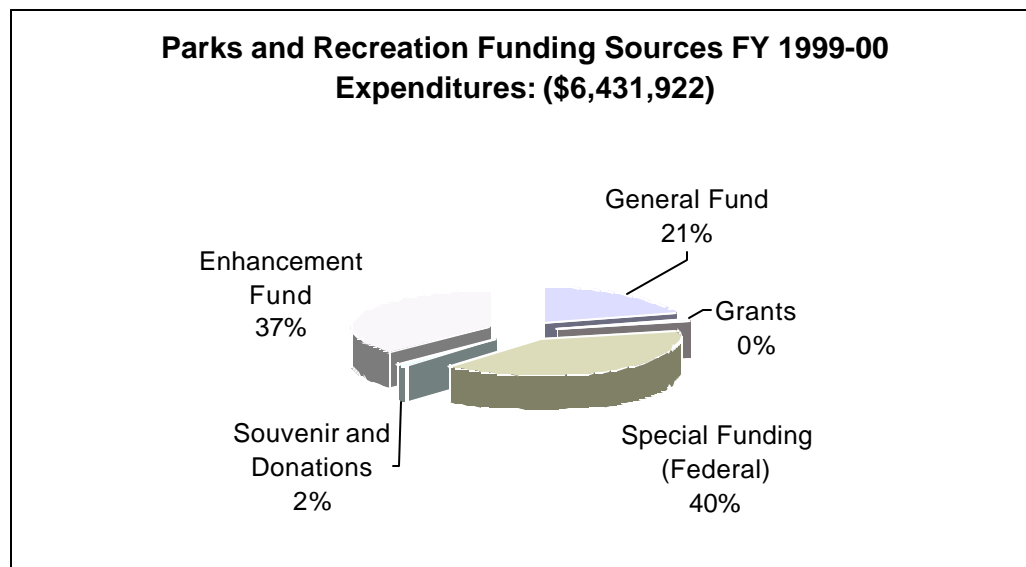
Issue

This report will evaluate existing staffing, operations, and maintenance requirements for Maricopa County Parks and Recreation facilities, and validate need and costs for system improvements requested by the Parks and Recreation Department.

Background

During discussions concerning the Maricopa County Open Space Initiative, the Maricopa County Parks and Recreation Department requested increased funding for current park staff, operating expenses, major maintenance and capital improvements. Currently, the Parks and Recreation Department has three major funding sources. The General Fund \$1.34 million; the Park Enhancement Fund \$2.396 million; and Special Revenue Funding of \$2.57 million. The Parks and Recreation Department's total budgeted expenditures for FY 1999-00 for all funding sources are \$6,431,922.

The current Parks and Recreation Department funding is illustrated in the following chart:



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The Parks and Recreation current budget (FY 99-00) includes \$2.4 million in the Park Enhancement Fund. Previously, the Park Enhancement Fund revenue had been deposited into the General Fund. The Board of Supervisors created this special revenue fund in order to accumulate resources for some of the system enhancements needed by the Parks Department.

Maricopa County's Parks and Recreation Department now features the nation's largest County Park system, with 10 regional parks totaling more than 116,000 acres. The park system began in 1954 to preserve the mountain areas for future generations to enjoy. A federal act in the 1960's allowed Maricopa County to acquire thousands of acres of parkland at \$2.50 an acre. Today, more than 2 million park visitors each year enjoy affordable outdoor recreation in the County Park system. Each county park has its own unique characteristics offering recreation to Valley residents and visitors alike. Some parks offer boating, picnicking, and golf, archery and shooting ranges. Others have camping and recreational vehicle facilities. Most offer hiking and mountain biking.

The following table (Table 1) provides general background information for each of the major County parks:

General Background Information			
Park	Size (acres)	Number of FY 97-98 Visitors*	Number of Full-time Park Employees
Estrella	19,840	301,329	5.5
McDowell	21,099	140,754	4.5
Usery	3,648	153,746	4.5
White Tank	26,692	245,524	4.5
Lake Pleasant	23,662	519,512	19
Cave Creek	2,922	69,368	3.5
San Tan	10,118	0	1
Desert Outdoor Center	N/A	970	5
*Department usually multiplies # of vehicles entering park by a factor of 3 to estimate park visitation.			

Table 1

In FY 98-99, Parks and Recreation reported 73,765 man-hours from volunteers, which equates to about 35 FTE's. These volunteers primarily fill the role of Park Hosts,

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completing such tasks as answering phones, prepping campsites, manning park entry booths, and a variety of other very valuable activities.

In addition to the existing park needs, the Parks and Recreation Department has developed a detailed request for staffing and equipping proposed new parks. However, given the magnitude of the Parks Department request in regard to existing parks, the scope of this research report will be limited to an exploration of the need for and cost/benefit of proposed improvements to current operations. Staffing levels for proposed new parks should be consistent with current park staffing levels.

Discussion

The Parks and Recreation Department request for additional staffing, operations and capital improvement funding represents an enormous increase in County investment in park operations. The County currently allocates approximately \$1.34 million dollars from the General Fund to the Parks and Recreation Department. The department has requested 52 new employees to enhance park operations. The following table (Table 2) breaks down the position request by position type:

Positions Requested		
Position	Number Requested	Annual Estimated Cost
Park Police	16	\$ 548,954
Educators	11	377,406
Office Clerks	2	50,326
Park Supervisors	2	86,759
Project Designers	2	86,759
Construction	4	128,952
Maintenance Workers	11	309,595
Trails	4	112,580
Total	52	\$ 1,701,331

Table 2

In addition to the personnel increases, Parks and Recreation has also requested \$1.7 million dollars for capital equipment purchases (primarily vehicles), and \$41 million in major maintenance, capital replacement, and capital development. This \$41 million includes everything from purchase of new picnic tables to construction of visitor centers at various County parks. Because the Parks and Recreation Department is one of only a few non-mandated departments, the County has delayed funding repair and replacement for some of the major maintenance items and capital improvement projects within existing parks. Over the last few years higher funding priorities such as law enforcement and health care have taken precedence.

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As shown in Table 2 the Department's request for 52 new positions would cost \$1,701,330. These additional staff members would increase annual General Fund allocations to the Parks Department by 127%.

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The Department has also requested \$1,707,000 for new equipment. The following table (Table 3) summarizes the Department's equipment request.

Parks Equipment Request		
Equipment	Est. Cost	Comments
Dump Trucks	\$ 280,000	7-1 Ton Stake Bed Dump Trucks
Utility Carts	\$ 112,000	14-Utility Carts
Skip Loaders	\$ 150,000	3-Skip Loaders
1/2 Ton P/U Trucks	\$ 430,000	17-1/2 Ton P/U, 3 4X4 P/U
3/4 Ton P/U Trucks	\$ 105,000	3-3/4 Ton Ext. Cab, SVCB
Utility Compacts	\$ 490,000	14-Utility Compact 4X4/4Dr
Utility Full Size	\$ 40,000	1-Utility Full Size 4X4/4Dr
Steam Cleaner	\$ 10,000	1-Trailer Mounted Gas Powered Steam Cleaner
Gas Storage Tanks	\$ 60,000	3-Above Ground Gas Storage Tanks
Passenger Van	\$ 30,000	1-12 Passenger Van
Total	\$ 1,707,000	

Table 3

The combined impact of the staffing and equipment request is \$3,408,330 or a 254% increase in General Fund support of the Parks and Recreation Department. The Department has also requested nearly \$41 million for capital improvements and major maintenance for the existing County parks.

The Maricopa County Parks system provides citizens with a wide array of outdoor recreational activities including hiking, mountain biking, equestrian use, camping, golfing, archery and target shooting. Many of the staff-intensive operations such as golfing, archery and the shooting range have been contracted out to private entities. Most of the remaining recreational activities take advantage of the natural beauty and open space of the park facilities. These activities, such as hiking, biking and equestrian use, require minimal maintenance beyond trail maintenance and trash pick-up. The Parks and Recreation Department is mainly responsible for maintaining the small portion of each park facility that is developed and for providing a safe recreational environment for park visitors.

The developed portion of most of the Maricopa County Parks include restrooms, camping facilities, an entry booth and a maintenance shop that essentially doubles as park headquarters. The need for maintenance work and staff vary considerably for each Maricopa County Park depending on the level of development and park usage. The following list identifies the maintenance requirements at each park:

White Tank

- 2 full time maintenance workers at the park. Extensive use of volunteers.
- Daily cleaning of 11 restroom facilities.

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- Daily trash collection, cleaning of ramadas, cleaning and preparation of 40 campsites and a group camping area.
- Clean, repair picnic tables and grills.
- Accept reservations for campgrounds.
- Repair any broken items at the restrooms, campgrounds and ramadas. Repair signage.
- Monthly cleaning of septic tanks (15).
- Conversion of an old trailer into a visitor center.
- Preparation for the bi-annual Sonoran Bike Race (March and October).
- Maintain 22.2 miles of trails.
- 6-person prison crew used for cleaning trash once every two weeks

Estrella

- 3 budgeted maintenance staff positions.
- Clean, maintain and repair 10 restrooms (larger restrooms than at White Tanks).
- Clean, maintain and repair 11 group ramadas.
- Maintain and repair antiquated irrigation system.
- Clean, repair picnic tables and grills.
- Clean and maintain a rodeo arena.
- Mowing and care of 65 acres of park turf plus two ball fields. The mowing is currently contracted out.
- Maintenance and repair of streetlights and ball field lights.
- Monthly reading of traffic, electrical and water meters.
- Monthly cleaning of septic tanks.
- Maintenance and repair of an outdoor amphitheater.
- Maintain 34.4 miles of trails.
- Gopher control (currently contracted out).
- Clean graffiti
- Prepping of 7 campsites.
- Daily trash collection.
- Approximately 1,000 trees to trim and maintain
- Community service and volunteer labor is used extensively

Cave Creek

- 1 Maintenance worker
- Clean, maintain and repair of 7 restrooms. (16 total toilets, 8 showers).
- Campground cleaning and site preparation (38 sites).
- Accept reservations for campsites.
- Landscaping, construction of volleyball courts, fencing.
- Clean graffiti
- Monthly cleaning of septic tanks.
- Maintain 11.3 miles of trails.
- Travel to Adobe Dam site for trash collection once a week.
- Daily cleaning and repair of 7 group ramadas.

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McDowell Mountain Park

- 2 full time maintenance workers at the park. Extensive use of volunteers.
- Daily cleaning, maintenance and repair of 12 restrooms.
- Daily campground cleaning and site preparation, (2 family campground areas, 80 total sites).
- Cleaning, maintaining and repair 4 ramadas
- Accept reservations for campsites.
- Clean graffiti
- Maintain 45 miles of trails.

San Tan Park

No improvements or facilities at this park. Because of the lack of amenities there is no entry fee for this park.

Lake Pleasant

- 4 full time land maintenance workers at the park. Extensive use of volunteers and community service workers.
- Daily clean, maintain and repair of 25 restrooms (5 with showers; 8 without showers; 6 composting toilets; 6 in staff building; plus 20 portable toilets. (total of 24 man-hours daily)
- Prepping and maintenance of 140 campsites.
- 3 full-time Nav-Aid Technicians
- 480 buoys
- 1 boat house
- 2 boats
- 1 floating restroom
- Water levels fluctuate 80-100 feet per year (Rise and fall of water level necessitates staff adjusting NAVAIDS for boater safety).

Usery Park

- 2 full-time maintenance workers. Extensive use of volunteers. DUI work crew one day per week (3-4 workers)
- Daily clean, maintain and repair 15 restrooms (4 with showers are cleaned twice daily; plus 6 portable toilets)
- Preparation and maintenance of 75 single campsites and 6 group sites which can handle 225 RV's
- 100 picnic sites
- 15 miles of trails

Based on information from the maintenance staff, restrooms typically require about 1/2 hour to clean and campsites about 15 minutes to clean and prepare for new visitors. Park hosts frequently provide much of the restroom and campsite cleaning labor for the parks. For example, park hosts usually clean 8 out of the 12 restrooms at McDowell Mountain Park.

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Continuing with McDowell Mountain Park as a working example, the two maintenance workers spend about one hour every work day cleaning restrooms except for the days when only one of the workers is present, thus doubling the time for restroom cleaning. On an extremely busy day, the maintenance workers may have to clean and prepare 8 campsites (given 80 campsites and a 14 day average stay in the busy winter season, we would expect an average of almost 6 sites to be turned over on a daily basis) campsites, requiring 1 hour for two workers or 2 hours for one worker. With just one worker present, restroom cleaning and campsite preparation will only occupy half of the workday. Other duties such as maintenance and repair of concrete ramadas, accepting reservations for campsites, tree trimming and other miscellaneous projects fill up the remainder of a park maintenance worker day. There will occasionally be days when repairs to restrooms, water lines, electrical service, etc. require additional worker time.

Considering that the parks are open every day and staff members typically work 5 out of the 7 days a week, there are times when staff coverage is limited. Park usage also follows a seasonal pattern, increasing maintenance workload in the winter when park usage increases, and tapering off during the hotter periods of the year. However, even one worker can perform the usual routine daily maintenance functions without additional paid staff provided park hosts are available to assist with cleaning. Cave Creek Park is the only major facility with only one maintenance worker; therefore the only park that definitely will not have park-employee maintenance coverage on some days. When park maintenance employees have to spend much of the workday doing repair work, then the park system becomes increasingly dependent on park hosts to keep the parks clean.

The Maricopa County Parks and Recreation Department has a large Park Police (formerly Park Rangers) staff to ensure visitor safety and to protect the resources present throughout the park system. There are usually about 20 park police officers on staff (vacant positions sometimes reduce staff) to provide law enforcement within the boundaries of the Maricopa County Parks. Although officers typically report to a specific park to begin each work day, the staff is officially organized in 3 divisions: West Side, covering Estrella, White Tank, and eventually Buckeye Hills; North Side, covering Lake Pleasant (along with Sheriff's officers) Cave Creek, and Adobe; East Side, covering McDowell, Usery and San Tan. It is difficult to quantify how a typical park police officer spends the workday given the enormous variety in the size and usage of each park. Park police officers generally begin the day at their assigned park, driving through the park (this can vary from 10 minutes to almost an hour depending on the park) and then proceeding to the campgrounds to make sure all campers have paid the necessary camping fees. Park police officers then continue to patrol, meet with groups visiting the park, write citations as necessary and provide assistance to visitors.

The current Maricopa Parks and Recreation Park Police staff appears adequate in size for providing law enforcement for County Parks based on the criminal workload as measured by written citations and by comparison with other similar park jurisdictions with park

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rangers/police. The City of Phoenix South Mountain Park has approximately 3 million annual visitors and has 3 full-time park police. Pima County Parks and Recreation Department has 38 parks including several mountain park preserves similar in size and scope to the Maricopa County Park system and has only 5 full-time park police on staff.

According to statistical information provided by the Parks and Recreation Department there were a total of 655 written violations in the mountain parks, none of which was violent in nature. However, up until 3 months ago violent crime figures were required to be reported by the Sheriff's Office. The park police staff is just beginning to collect violent crime statistics. The park police issued over 1,200 citations at Lake Pleasant Park last year. However, in addition to the park police, there are 6 sheriff's deputies assigned to Lake Pleasant.

Park Enhancement Fund

The Maricopa County Parks and Recreation Department charges visitors an entry fee to use park facilities. The money generated from fee revenue (including entry fees, camping fees and other special use fees) is funneled into the Parks Enhancement Fund. Under this funding mechanism, park users would pay for park improvements. Unfortunately, it appears that the Parks Department is only collecting a portion of the entry fee revenue due to the parks.

During FY 98/99, approximately 89,000 vehicles entered Estrella Mountain Park. At a conservative average entry fee of \$3 a vehicle (buses pay more and some users purchase an annual pass), entry fee revenue should have been \$267,000 for the year. However, actual entry fee revenue was only about \$120,000. The Estrella Park only collected roughly 45% of entry fee revenue due to the facility. At White Tank Mountain Park, approximately 74,000 vehicles entered the park during FY 98-99, but total entry fee and other day use revenue was reported at about \$112,000. Entry fee revenue alone should have been \$222,000. If the Parks and Recreation Department can capture the entry fee revenue owed to the parks, then the department will have a large portion of the revenue necessary to fund a least a portion of the major maintenance and capital improvements projects currently under review. Parks and Recreation should make every effort to man the entry booths in order to increase revenue collection. Parks and Recreation has entered into an agreement to install at all the parks an automated park entry feature that will accept credit cards and/or make change for park visitors. Hopefully this will help to recapture a portion of the lost potential revenue without adding staff.

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Table 4 illustrates the revenue potential:

Vehicle Traffic County Summary 1998					
Park	Entry Fee	No. of Vehicles	Expected Revenue	Actual Revenue	Revenue Shortfall
Cave Creek	\$ 3.00	25,572	\$ 76,716	\$ 33,745	\$ 42,971
Estrella	\$ 3.00	88,580	\$ 265,740	\$ 120,317	\$ 145,423
Lake Pleasant	\$ 5.00	288,536	\$ 1,442,680	\$ 853,059	\$ 589,621
McDowell	\$ 3.00	50,275	\$ 150,825	\$ 59,801	\$ 91,024
Usery	\$ 3.00	90,616	\$ 271,848	\$ 111,840	\$ 160,008
White Tank	\$ 3.00	82,806	\$ 248,418	\$ 118,822	\$ 129,596
Total		626,385¹	\$ 2,456,227	\$ 1,297,584	\$ 1,158,643

Table 4

The Park Enhancement Fund FY 99-00 budget included an estimated \$598,660 beginning fund balance and \$220,000 as the budgeted ending fund balance. The actual beginning fund balance was \$746,690². Assuming that the budget is on target the actual ending fund balance will be \$368,030. This would provide some of the funding for items in need of replacement.

Conclusions

The use of the Park Host Program is an exceptional value. The park hosts provide 20 hours of labor in exchange for an individual campsite at no charge (a \$15 a night value), which includes a water, propane and electrical hook-up. Considering that a married couple occupies most of the host campsites, the Parks Department essentially gets 40 hours of labor for \$105.00 per week in unrealized revenue. The continuation and/or expansion of this program is highly encouraged. The Parks and Recreation Department could not effectively operate without this program!

Our tour of the Maricopa County Parks revealed a clean, well-run network of county parks. It was obvious that most of the employees were dedicated, motivated, and innovative. For example, John Tauscher, the Park Supervisor at White Tank, completely refurbished a trailer donated by Flood Control into a park visitor center primarily using donated time and materials.

¹ Based on counter totals. Includes staff, campers, and trailers.

² Based on Comprehensive Annual Financial Report (CAFR)

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Based on information provided from Parks and Recreation, OMB cannot at this time recommend additional staff increases for park police, park supervisors, park educators, construction workers or most of the additional vehicles. Parks and Recreation failed to demonstrate that the increase to visitor satisfaction, park safety, and improvement to facilities warrants the cost of adding these additional resources. None of the information provided by Parks and Recreation nor our own observations can support a recommendation for more than one additional vehicle. Normal replacement of vehicles should continue in accordance with current County vehicle replacement policy.

The following table illustrates the historical spending for object codes 825 (repairs and maintenance), 915 (building and improvements), 920 (equipment) for the Parks and Recreation Department. The average expenditures for fiscal years 96-97 through 99-00 were \$3,028,590.

Parks and Recreation Expenditures for Repairs, Maintenance, and Improvements				
FY 99/00	FY 98/99	FY 97/98	FY 96/97	Average
1,998,900	1,690,600	4,814,328	3,610,530	3,028,590

Table 5

Based on a comparison of the depreciation table presented as appendix 1 of this report and table 5, it appears that the repairs and maintenance, buildings and improvements, and equipment purchases budget is sufficient to support Parks and Recreation requirements. The depreciation schedule indicates \$2,140,977 is needed annually for major maintenance/replacement of capital and equipment items. Items maintained through maintenance contracts and items not clearly capital in nature were excluded from the depreciation schedule. For example, the golf course at Estrella is maintained by contract; therefore it was excluded from the depreciation schedule. OMB does not consider items such as trails as depreciable assets. It should be noted that the Department of Finance and the Parks and Recreation Department provided fixed asset lists. Information provided by the two departments was not consistent. For example, the Desert Outdoor Center was valued at \$1,770,354 by the Department of Finance while Parks and Recreation listed it at \$7,500,000. This type of discrepancy illustrates the need for an accurate and detailed inventory of assets. The depreciation schedule presented in appendix one used the valuations provided by the Parks and Recreation Department.

Performance Measures

- Entry feature improvements should increase revenue collections by 25 % during the first full year of feature implementation.

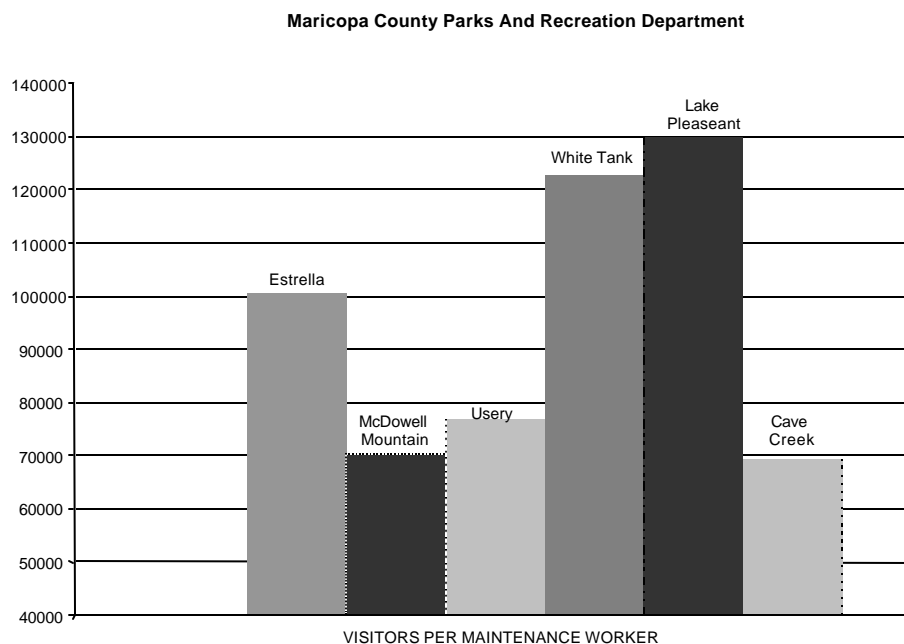
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- The replacement of older park facilities should create a measurable reduction in maintenance time currently spent repairing dilapidated items.
- Additional maintenance staff should improve the cleanliness, safety and visual appeal of the county parks, ultimately resulting in increased customer satisfaction as measured by park usage and customer satisfaction surveys.
- Collect additional data for management level measures to more fully validate staff requirements such as hours of overtime and duration of facilities/equipment down time due to lack maintenance workers.

Recommendation

Based on the information provided by Parks and Recreation Department, information provided by other park jurisdictions and our own analysis and observations, OMB recommends the following:

- Add 2 full-time maintenance staff, one for Lake Pleasant, and one at Estrella based on the following graph depicting annual park visitation per park maintenance worker:
- Estrella Mountain Park has many maintenance requirements not present in the other



parks. For example, Estrella has baseball fields, a large lawn area, many mature landscape trees that require trimming, and a rodeo arena. Estrella's unique features make it more challenging to maintain than other mountain parks, and makes it difficult to compare. However, this park also has an annual visitor to maintenance worker ratio that is significantly higher than the McDowell, Utery and Cave Creek park facilities. Based on these facts, OMB recommends adding a maintenance worker to the Estrella Mountain Park staff.

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- Lake Pleasant and White Tank Mountain Regional Park clearly have the highest annual visitor to maintenance worker ratio in the Maricopa County park system. Due to the high level of park usage per maintenance worker, OMB recommends adding one maintenance worker to the Lake Pleasant park staff.
- The Parks and Recreation Department requested four trail workers. Based on discussions with the department, our observations, and other jurisdiction practices, OMB recommends the addition of two trail maintenance workers to the Parks and Recreation staff to develop, improve, and maintain park trails. We also recommend an additional utility vehicle as transportation for the additional trail maintenance staff.
- Parks and Recreation should man the entry gates in an effort to improve revenue collection.
- OMB does not recommend additional funding for major maintenance and capital improvements at this time. Any necessary repairs and maintenance should be covered by existing funding sources. Any major maintenance item unable to be completed with existing funds should be fully justified and submitted as a budget issue.
- If approved, OMB recommends these new positions be funded starting in fiscal year 00-01. The following table illustrates the annual costs associated with the new vehicle and staff positions.

Full Year Cost of Recommended Additions FY 00/01				
Position	Number Recommended	Wages/ Benefits	One-time Cost	Total
Maintenance Worker	2	\$ 55,312		\$ 55,312
Trail Worker	2	\$ 55,312		\$ 55,312
Utility Vehicle	1		\$ 30,000	\$ 30,000
Total Annual Cost	4	\$ 110,624	\$ 30,000	\$ 140,624

Table 6

As indicated in our report, OMB recognizes that there is not enough management level information to justify all of the positions requested by Parks and Recreation. Parks and Recreation has agreed to develop a workload schedule/staffing model, which will better illustrate their perceived need for additional staff. OMB has agreed to provide technical assistance in developing this staffing model.

Any additional personnel or major maintenance items should be funded to the fullest extent possible by special revenue. The General Fund should be the funding source of last resort.